

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-5 (Canceled).

6. (Currently Amended) A method of making a heat resistant FeCrAl-alloy with improved oxidation resistance, the method comprising: applying a Ca-containing layer on the surface of the alloy and heat treating in one or more ~~several~~ steps,

wherein the FeCrAl-alloy comprises at least 1.5 wt.% Al, and

wherein the Ca-containing layer has a composition including 0.05 wt.% to 10 wt.% Ca.

7. (Previously Presented) The method according to claim 6, further comprising heat treating the alloy at a temperature of between 800°C and 1200°C in an oxidizing atmosphere.

8. (Previously Presented) The method according to claim 6, wherein the Ca-containing layer is applied as a Ca-containing compound in the form of calcium carbonate, calcium nitrate, calcium stearate, calcium-rich colloidal dispersion or in the form of calcium oxide or mixtures of such oxides or combinations thereof.

9. (Currently Amended) The method according to claim 6, wherein the Ca-containing compound is applied to a FeCrAl alloy to form is a strip, a bar, a wire, a tube, a foil or a fiber.

10. (Currently Amended) A The method according to claim 6 of making a heat resistant FeCrAl-alloy with improved oxidation resistance, the method comprising:

applying a Ca-containing layer on a surface of the alloy and heat treating in one or more steps,

wherein the Ca-containing compound is applied by Physical Vapor Deposition.

Claim 11 (Canceled).

12. (Previously Presented) The method of claim 6, wherein the heat treatment is performed at 850-1150°C.

13. (New) The method according to claim 10, further comprising heat treating the alloy at a temperature of between 800°C and 1200°C in an oxidizing atmosphere.

14. (New) The method according to claim 10, wherein the Ca-containing layer is applied as a Ca-containing compound in the form of calcium oxide or mixtures of such oxides or combinations thereof.

15. (New) The method according to claim 10, wherein the FeCrAl alloy is a strip, a bar, a wire, a tube, a foil or a fiber.

16. (New) The method of claim 10, wherein the heat treatment is performed at 850-1150°C.

17. (New) The method of claim 10, wherein the Ca-containing layer has a thickness of between 10 nm and 3 microns and has a composition including 0.01 wt.% to 50 wt.% Ca.

18. (New) The method of claim 17, wherein the thickness is between 10 nm and 500 nm.

19. (New) The method of claim 18, wherein the thickness is between 10 nm and 100 nm.

20. (New) The method of claim 17, wherein the composition includes 0.05 wt.% to 10 wt.% Ca.

21. (New) The method of claim 20, wherein the composition includes 0.1 wt.% to 1 wt.% Ca.

22. (New) The method of claim 10, comprising applying at least two Ca-containing layers, wherein Ca-containing compounds in a first Ca-containing layer differ from Ca-containing compounds in a second Ca-containing layer.

23. (New) The method of claim 22, wherein the first Ca-containing layer includes a metal surface adhesion promoting Ca-containing compound and the second Ca-containing layer includes a high temperature corrosion resistant Ca-containing compound and wherein the first Ca-containing layer is a first layer adjacent the surface of the alloy.

24. (New) The method of claim 23, wherein the second Ca-containing layer is an outermost layer.

25. (New) The method of claim 10, wherein the FeCrAl-alloy comprises at least 1.5 wt.% Al.

26. (New) The method of claim 6, wherein the Ca-containing layer has a thickness of between 10 nm and 3 microns.

27. (New) The method of claim 26, wherein the thickness is between 10 nm and 500 nm.

28 (New) The method of claim 27, wherein the thickness is between 10 nm and 100 nm.

29. (New) The method of claim 6, wherein the composition includes 0.1 wt.% to 1 wt.% Ca.

30. (New) The method of claim 8, wherein the Ca-containing compound is in the form of a fluid, a gel or a powder.

31. (New) The method of claim 30, wherein the Ca-Containing compound is a colloidal dispersion with a Ca-content of approximately 0.1 vol.%.

32. (New) The method of claim 6, comprising at least one drying step at a temperature below approximately 200°C.

33. (New) The method of claim 6, comprising applying at least two Ca-containing layers, wherein Ca-containing compounds in a first Ca-containing layer differ from Ca-containing compounds in a second Ca-containing layer.

34. (New) The method of claim 33, wherein the first Ca-containing layer includes a metal surface adhesion promoting Ca-containing compound and the second Ca-containing layer includes a high temperature corrosion resistant Ca-containing compound and wherein the first Ca-containing layer is a first layer adjacent the surface of the alloy.

35. (New) The method of claim 34, wherein the second Ca-containing layer is an outermost layer.

36. (New) The method of claim 6, wherein the FeCrAl-alloy comprises 1.5 wt.% to 8.0 wt.% Al.

37. (New) The method of claim 10, comprising cleaning the surface of the alloy prior to applying the Ca-containing layer.